REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-12 and 14-24 are pending in the present application. Claim 13 has been canceled, claims 20-24 have been added and claims 4 and 7 have been amended by the present amendment.

In the outstanding Office Action, claims 1-13, 14-16 and 19 were rejected under 35 U.S.C. § 103(a) as unpatentable over Dahlman et al.; claims 4-13 were rejected under 35 U.S.C. § 103(a) as unpatentable over Dahlman et al. in view of Burns; claims 17 and 18 were rejected under 35 U.S.C. § 103(a) as unpatentable over Dahlman in view of Tsg-Ran; claims 7-12 under 35 U.S.C. § 102(a) as anticipated by Tsg-Ran; claims 4-6 were rejected under 35 U.S.C. § 103(a) as unpatentable over Tsg-Ran; and claim 13 under 35 U.S.C. § 103(a) as unpatentable over Tsg-Ran in view of Dahlman et al.

In response to the previously filed arguments, the Office Action indicates that Dahlman et al. discloses modifying sequences of binary codes with shift registers to generate scrambling codes that meet the recitation and modifying the code with another code to generate a secondary code. However, it is respectfully noted independent claim 1 of the present invention specifically recites that the secondary scrambling code is generated by

12

shifting the primary scrambling code. Independent claims 3, 4, 7, 14 and 19 include similar features in a varying scope.

In a non-limiting example, Figure 7 illustrates a primary code P and secondary codes $S_1 \ldots S_{16}$. Note, the secondary codes $S_1 \ldots S_{16}$ are generated by shifting the primary code P. On the contrary, Dahlman et al. does not shift a primary code to generate a secondary code. Rather, as clearly described in col. 5, lines 3-17 and Figure 4, three separate codes C_j, $C_{j,1}$ and $C_{j,2}$ are generated. In more detail, to generate the scrambling code for the normal transmission mode, C_j, the shift register 202 in Figure 4 is loaded with the values $00n_{15} \ldots n_2$ $n_1 n_0$ and the values $111 \ldots 111$ are loaded in the other shift register 204 to generate the scrambling code for the normal transmission mode (i.e., the scrambling code C_j). To generate the scrambling code for the slotted mode transmission, $C_{j,1}$, the values $01n_{15} \ldots$ $n_2 n_1 n_0$ are loaded in the shift register 202 and the values $111 \ldots 111$ are loaded into the other shift register 204. Note, there is no shifting in the values in the shift register 202 to determine another scrambling code. For example, the most significant bits for the first shift register 202 are 00 for C_j, and for the slotted scrambling code $C_{j,1}$, the most significant bits are 01. The other bits are the same. As shown, the scrambling codes C_j, $C_{j,1}$ and $C_{j,2}$ are created completely independent of each other. There is no shifting of bits of a primary code to generate a secondary scrambling code. This is also true in the generation of the

13

scrambling code $C_{j,2}$ for the slotted transmission mode. The other references also do not teach or suggest these features.

Further, as apparent from the above description, the present invention provides a forward multiple scrambling code generating method and apparatus capable of simultaneously generating a primary scrambling code and a secondary scrambling code using a single code generator when a particular base station is required to generate those scrambling codes in a simultaneous fashion. Accordingly, the present invention provides advantages in that the manufacturing costs and load are reduced. It is also possible to reduce the size and power consumption of user elements. Since the initial value required for the generation of a particular primary scrambling code is known in that it corresponds to the code number of the primary scrambling code, it is possible to greatly reduce the amount of calculations for the setting of initial values required for the generation of scrambling codes. Thus, there is an advantage in that it is possible to eliminate a time delay involved in conventional cases due to a large amount of calculation for the setting of initial values.

Further, the Office Action also indicates Dahlman et al. teaches the features recited in dependent claims 2 and 15. However, it is respectfully noted the features recites in dependent claims 2 and 15 include specific bit values, which are not taught in Dahlman et al. Similar comments apply to the specific tables provided in dependent claims 17 and 18. That

is, the applied art does not teach or suggest the specific tables recites in these dependent

claims.

In addition, independent claim 19 also recites that the primary scrambling code and

the supplemental scrambling code are generated concurrently. This further distinguishes

from Dahlman et al. in which the scrambling codes are generated independently.

Accordingly, it is respectfully submitted independent claims 1, 3, 4, 7, 14 and 19 and

each of the claims depending therefrom are allowable.

Further, new dependent claims 20-24 have been added to set forth invention in a

varying scope, and Applicants submit the new claims are supported by the originally filed

application.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance are earnestly solicited. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, **David A. Bilodeau**, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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16